Telephone: (209) 831-4420 Fax: (209) 831-4472

June 26, 2006

Ms. Pamela Creedon, Executive Officer Regional Water Quality Control Board for the Central Valley Region 11020 Sun Center Drive #200 Rancho Cordova, CA 95670

Re: Comments on Draft NPDES Permit for the City of Tracy

Dear Ms. Creedon:

The City of Tracy ("City") would like to thank the Regional Water Quality Control Board for the Central Valley Region ("Regional Water Board") for working with the City and making changes to the City's draft NPDES permit. In particular, the City appreciates the interim program proposed to address salinity issues related to the City's discharge and allowing the use of harmonic mean dilution for human health constituents. The City believes that these changes are consistent with the State Water Resources Control Board's decision in the Woodland decision, SWRCB Order No. WQ 2004-0010.

Although the City appreciates the changes made, the City still has several serious concerns with many of the draft permit's requirements. The City has provided comments previously and reiterates those comments in the attached detailed comments. However, many of the City's requested changes have not been incorporated into the draft permit even though these changes are required to make the permit consistent with state and federal requirements. The City's goal is to have a permit that is on the consent calendar for the Regional Water Board. Unfortunately, at this time, the City remains unable to consent to adoption of the draft permit as written.

The City's four main concerns with the draft permit and accompanying Time Schedule Order ("TSO") are as follows:

#### 1. The Interim Limits Should Be Placed in the Permit, instead of the TSO.

Under recent binding appellate case law, the regional boards have the ability to use the Basin Plan's compliance schedule authority to include interim limits and compliance schedules in permits for any new interpretations of narrative objectives. *Communities for a Better Environment v. State Water Resources Control Board*, 34 Cal.Rptr.3d 396, 410 (2005). Since

most, if not all, of the interim requirements set forth in the TSO are based upon narrative objectives, and new interpretations of those narratives with the conclusion that now effluent limitations are required, the Regional Water Board should include the interim limits and compliance schedules in the NPDES permit. If the Regional Water Board does not do so, Tracy will be in a position where it can be enforced against for the final limits in its permit as the TSO may not work to amend those limits. See Citizens for a Better Environment-California v. Union Oil (9th Cir. 1996) 83 F.3d 1111, 1119 (finding a separate cease and desist order extending the compliance schedule did not suspend limits and deadlines in the permit, thereby allowing a citizen suit to proceed against the discharger for failure to comply with the terms of the permit). Given the recent increase in citizen suits around the State, the City does not want to be in jeopardy for non-compliance with permit limits that are not applicable because interim limits are not included within the permit. The City hopes that the Regional Water Board will give careful consideration to making the requested revisions related to interim limits.

### 2. Many of the Effluent Limits Prescribed are Inconsistent with State and Federal Requirements.

The City has provided comments on specific effluent limits to demonstrate that the Regional Water Board has not followed requirements of federal and state law when imposing many of the effluent limitations. For example, the Regional Water Board has imposed daily limits for human health constituents when the State Water Board has specifically told the Regional Water Board in the Woodland Order, No. WQ 2004-0010 that implementing the limits as short term maxima is incorrect because the criteria or guidance value is intended to protect against chronic effects. This rationale applies to the limits for iron, manganese, dichlorobromomethane, and chlorodibromomethane. Further, the imposition of daily limits for these and other constituents (e.g., conventional pollutants) is inconsistent with federal law since longer term limits are not impracticable. 40 C.F.R. §122.45(d)(2). The City would also like the Regional Water Board to address the City's other comments regarding the inappropriateness of mass limits in addition to concentration limits (particularly for conventional pollutants) and monthly average mass limits for mercury before the final permit is adopted.

#### 3. The Regional Water Board Should Amend the Temperature Requirements.

The permit should clearly state that the proposed temperature requirements are derived directly from the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (California Thermal Plan) and, therefore, are subject to modification per the exception language of the Thermal Plan. Full compliance with the proposed temperature requirements is not attainable by 1 August 2011 and, after the studies to be conducted, may not be required. The steps needed are (1) to perform a study of beneficial use impacts in the river to determine whether an exception to the specific water quality objectives in the Thermal Plan is warranted, and if so, what the appropriate objectives should be, (2) if it is determined that cooling facilities are ultimately required, to perform a pilot project and

study to determine the size and type of cooling systems needed, and (3) to prepare environmental compliance documentation and to complete design and construct a full scale project. Each of these steps take time, and particularly the timing of the environmental impact study is not wholly within the City's control. For these reasons, it is requested that the compliance schedule be placed in the permit and revised as follows:

Complete Thermal Plan exception study August, 2009

Complete pilot project and sizing study (if required) August 2011

Complete construction of facilities (if required)

Defer until next permit

#### 4. The Permit Should Not Contain the Proposed Compliance Determination Language.

The Regional Water Board is proposing to include language from the State Water Board' Permit Template guidance related to Compliance Determination. This language should be modified as requested in the attached comments for the following reasons. First, this language is directive to the Regional Water Board staff as to how and how many "violations" are to be determined. Permits do not regulate Water Board staff, so such language is inappropriately included in a permit and is more properly placed in a State Board or Regional Board enforcement policy or the Basin Plan.

Second, the Permit Template is not a binding regulation, but merely guidance that can be modified by regional boards. Both the Los Angeles Regional Board and the San Diego Regional Board have modified the language in question, but this Board has not made the requested changes. The City requests that language drafted by the San Diego Regional Board and included in the recently adopted permit, No. R9- 2006-002 be included instead of the currently proposed language. The requested language is included in the City's attached comments for the Regional Water Board's use.

The City looks forward to working with the Regional Water Board to resolve the City's remaining concerns before the scheduled hearing date in August of this year.

Very truly yours,

Steven G. Bayley

Deputy Director of Public Works

Attachments

cc: Erich Delmas, City of Tracy
Casey Wichert, City of Tracy
Vijay Kumar, CH2M HILL
Melissa Thorme, Downey Brand LLP
Tom Grovhoug, Larry Walker Associates
Joel Krein, Leprino Foods
Warren Tellefson, Executive Officer, CVCWA

## CITY OF TRACY'S COMMENTS ON DRAFT NPDES PERMIT R5-2006-XXXX

#### NPDES No. CA0079154

Comment deadline - June 26, 2006

The City of Tracy makes the following comments on the proposed NPDES Permit/WDR and attachments as well as on the corresponding Time Schedule Order (TSO). These comments incorporate by reference and repeat all previous comments made by the City that apply to provisions that were not amended in this draft of these tentative Orders.

#### COMMENTS ON PROPOSED TENTATIVE NPDES PERMIT/WDRs

In addition to its previous comments, the City makes the following comments on the NPDES Permit/WDR:<sup>1</sup>

**Page 2. Finding F.** The tentative permit inaccurately states that the technology-based effluent limitations based on tertiary or equivalent "meet" the technology-based secondary treatment requirements. This is incorrect as the tertiary treatment requirements exceed secondary treatment.

Request: Change "meet both" to "exceed" in the second sentence of Finding F.

**Page 3, Finding H.** The tentative permit does not specify any uses designated for Old River. The Regional Board should identify any uses specifically designated for Old River or provide evidence in the record that the uses specified for the Delta are applicable to Old River.

In addition, the table on Page 3 specifies that Discharge Point 001 is to the Sacramento-San Joaquin Delta. The column regarding Discharge Point should be removed or the Receiving Water Name should be revised to "Old River" since the City's outfall is to a stretch is known as Old River.

In the same table, in the second column, the Receiving Water Name should be changed from "Underlying Groundwater" to "Deep Water Aquifer" since no one uses shallow groundwater for drinking water purposes and it may not meet the criteria set forth under Resolution 88-63. This change would provide the City with some flexibility in any future groundwater impact studies.

Request: Make requested changes to Finding H.

**Page 4, Finding L. Antidegradation Policy.** As previously stated, the Antidegradation Policy, adopted as a State Water Board resolution in 1968 cannot have incorporated a federal antidegradation rule adopted much later in time. The appropriate language would be to state that "Resolution 68-16 <u>has been deemed to be consistent with incorporates</u> the federal antidegradation policy..."

<sup>&</sup>lt;sup>1</sup> These comments may also apply to similar issues in the Fact Sheet. As such, the City requests that conforming changes be made to the Fact Sheet.

Request: Amend the third sentence as set forth above. Eliminate the fourth sentence, which inaccurately states the contents of Resolution 68-16 as it should apply only to high quality waters.

**Page 5, Finding M. Alaska Rule.** The text included is not wholly accurate and should be amended to read:

On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards (WQS) become effective for CWA purposes (40 CFR 131.21, 65 FR 24641, April 27, 2000, effective date of May 30, 2000). . . . The final rule also provides that standards already in effect under State law and submitted to USEPA for approval by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA unless or until USEPA has promulgated a more stringent water quality standard. However, if the State standards submitted before May 30, 2000 were disapproved by USEPA prior to May 30, 2000, as was the case with portions of the 1994 Basin Plan, the Alaska Rule did not apply to grandfather in these disapproved standards.

Request: Make the above requested changes to Finding M.

Page 5, Finding N. More Stringent than Federal Law. The allegation that the tentative permit contains restrictions that are not more stringent than required by federal law are incorrect. There are many instances where the permit requirements are more stringent, including tertiary treatment or equivalent requirements, mass limits in addition to concentration, numeric effluent limits, and daily or instantaneous limits, none of which are required by federal law and, therefore, are more stringent. Thus, this paragraph must be amended to correct these inaccuracies.

Request: Remove the first and last sentences of Finding N. Remove all text in the fourth sentence after the comma. Clarify whether any of the uses are being applied under the Tributary Footnote, which was disapproved by USEPA.

**Page 5, Finding O. Antibacksliding.** This finding should include language stating that effluent limitations can be removed upon new information, including a determination of no reasonable potential.

Request: Amend the finding to address allowable removal of effluent limits based on new information.

**Page 5, Finding P. Monitoring Requirements.** The second sentence in this finding is incomplete and should be amended.

Request: Amend the second sentence as follows: "Sections <u>13225(c)</u>, 13267(<u>b)</u>, and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports after the requisite burden analysis is performed."

**Page 7, Provision III.A.** This provision should be clarified that it only covers <u>treated</u> wastewater. This prohibition should no longer cover untreated wastewater upstream of the headworks as that is now covered by the Sanitary Sewer Overflow waste discharge requirements

and should not be duplicatively addressed here.

Request: Insert the word "treated" so Provision III. A. only applies to the "Discharge of treated wastewater."

**Page 7, Provision III.B.** This provision should only cover the by-pass and overflow of <u>partially</u> treated wastewater, not untreated as that is now covered by the Sanitary Sewer Overflow waste discharge requirements.

Request: Replace the word "untreated" with "partially treated."

**Pages 7-10, Provision IV.A.1.** *a.- l.* **Final Effluent Limits.** These sections on final effluent limits states that these limits are "effectively immediately" or effective on compliance with other provisions. However, some of these limits are not effective immediately because interim limits apply. A sentence or footnote should be added to state that these limits apply unless interim limits have been imposed, and upon the expiration of those interim limits. This same comment would apply for turbidity and coliform where the final limit makes no mention of an interim limit.

Preferably, the Regional Board could include the interim limits in the table. As an example taken from a proposed permit in the San Francisco Bay region (R2-2006-xxxx), the following sample chart includes final and interim limits in one place to make for a more streamlined and easy to understand permit. Tracy recommends that its permit be amended to include similar tables.

	Water Quality-Based Effluent Limits (WQBELs) <sup>1, 4</sup>		Interim Limits	
Constituent	Maximum Daily (MDEL) (μg/L)	Average Monthly (AMEL) (µg/L)	Maximum Daily (µg/L)	Average Monthly (µg/L)
Copper (2)	100	71		
Mercury (3)	0.037	0.022		0.087

#### Footnotes for Table 4:

- (1) (a) Compliance with these limitations is intended to be achieved through secondary treatment and, as necessary, pretreatment and source control.
  - (b) All analyses shall be performed using current U.S. EPA approved methods, or equivalent methods approved in writing by the Executive Officer.
  - (c) Limitations apply to the average concentration of all samples collected during the averaging period (daily = 24-hour period; monthly = calendar month).
  - (d) All metal limitations are total recoverable.
- (2) Alternate Effluent Limits for Copper:
  - a. If a copper SSO for the receiving water becomes legally effective, resulting in adjusted saltwater CCC of 2.5 μg/l and CMC of 3.9 μg/l as documented in the *North of Dumbarton Bridge Copper and Nickel Site-Specific Objective (SSO) Derivation (Clean Estuary Partnership March 2005)*, upon its effective date, the following limitations shall supercede those copper limitations listed

in Table 4 (the rationale for these effluent limitations can be found in the Fact Sheet [**Attachment F**]).

MDEL of 77  $\mu$ g/L, and AMEL of 53  $\mu$ g/L.

- b. If a different copper SSO for the receiving water is adopted, the alternate WQBELs based on the SSO will be determined after the SSO effective date.
- (3) The interim limit for mercury shall remain in effect until April 27, 2010, or until the Regional Water Board adopts a TMDL-based effluent limitation for mercury. WQBELs will be superseded by the TMDL. Effluent mercury monitoring shall be performed by using ultra-clean sampling and analysis techniques, with a method detection limit of 0.002 μg/L or lower. The mercury interim limit is derived from the Regional Water Board's *Statistical Analysis of Pooled Mercury Data*, 2001.
- (4) A daily maximum or average monthly value for a given constituent shall be considered noncompliant with the effluent limitations only if it exceeds the effluent limitation and the Reporting Level for that constituent. As outlined in Section 2.4.5 of the SIP, the table below indicates the Minimum Level (ML) upon which the Reporting Level is based for compliance determination purposes. In addition, in order to perform reasonable potential analysis for future permit reissuance, the Discharger shall use methods with MLs lower than the applicable water quality objectives or water quality criteria (e.g., copper). A Minimum Level is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed..

Constituent	Minimum Level	<u>Units</u>
Copper	2	μg/L
Mercury	0.002	μg/L

Request: Clarify that not all of the limits are "effective immediately" to avoid confusion over applicable limits, or include a chart as suggested that includes interim limits as is done in other regions.

Page 7, Provision IV.A.1.a. Oil and Grease/Settleable Solids Limits. The Oil and Grease parameter has a higher average monthly limit (15 mg/L) than the maximum daily limit (10 mg/L). These numbers are apparently transposed, and should be corrected. In addition, there is no valid reasonable potential analysis for either oil and grease or settleable solids. These are new limits that have not been adequately justified and should be removed. Furthermore, daily limits for these constituents have not been properly justified under 40 C.F.R. §122.45(d)(2).

In addition, the settleable solids limit is duplicative of the settleable matter receiving water limit in Provision V.A.5., at page 12, and is unnecessary.

Furthermore, these limits are being maintained ostensibly because of antibacksliding concerns, without an RPA being performed. *See* Fact Sheet at pg. F-39 and F-47. There is no demonstrated reasonable potential to exceed the narrative objectives for these constituents because there is no evidence that these constituents are causing nuisance, visible film or coating (for oil and grease), or adversely affecting beneficial uses. Without such a demonstration, the new information on the discharge shows that there is no reasonable potential and a limit is not

required under the new information exception to the general rule against backsliding.

Request: Remove or amend the Oil and Grease and Settleable Solids limits.

**Page 7, Provision IV.A.1.a. and Page E-5. pH Limits.** The City requests the following footnote be added to the limits for pH:

"(1) Pursuant to 40 CFR §401.17, for pH effluent limitations under continuous monitoring, the Discharger shall be in compliance with the pH limitation specified herein, provided that both of the following conditions are satisfied: (i) the total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and (ii) no individual excursion from the range of pH values shall exceed 60 minutes."

Request: Add the requested footnote to the pH Limits and reference same in the MRP.

**Page 7, Provision IV.A.1.a. Aluminum Limits.** The aluminum limit proposed as a monthly average is less than the lowest aluminum criteria guidance number. Therefore, this is more stringent than required under federal law and must include an analysis under Water Code sections 13263 and 13241. *See City of Burbank v. State Water Resources Control Board*, 35 Cal. 4th 613 (2005). Reasonable potential was found only because of calculations made to the City's data that uses a *Projected* Maximum Effluent Concentration (MEC) instead of the actual MEC of 74 μg/L. *See* Fact Sheet at pg. F-4. This projection of MEC is not authorized by the applicable guidance under the SIP Section 1.3, which requires that RPA be performed using actual observed MEC. Thus, the City requests that the Regional Board re-do the RPA using the actual MEC of 74 μg/L for aluminum (as well as any other limits where the Regional Board used *Projected* MEC, such as copper, MTBE and nitrate).

In addition, this limit fails to reflect local conditions and the fact that the the U.S. EPA chronic 304(a) guidance criteria for aluminum of 0.75 mg/L (CMC) and 0.087 mg/L (CCC) must be considered in light of site specific factors and issues related to indicator organisms, species diversity, population density, growth anomalies, or biotoxicity test results before a determination can be made as to whether or not an applicable water quality standard has been violated. As U.S. EPA pointed out in its criteria guidance "...aluminum is substantially less toxic at higher pH and hardness." Although no direct hardness-toxicity relationship has been established for aluminum, it is relevant that the toxicity of other metals decreases significantly as the hardness levels go up. For example, the chronic guidance criterion for copper at 28 mg/L hardness is about three times higher than the chronic criterion at a hardness of 8 mg/L. Applying this same

 $<sup>^2</sup>$  U.S. EPA modified the aluminum criteria in 2002 by expressing the criteria as total recoverable metal in the water column rather than acid soluble, and by adding the following footnote to the 87  $\mu$ g/L chronic criterion, which not only recognizes the above, but also states that "EPA is aware of field data indicating than many high quality waters in the U.S. contain more than 87 ug aluminum/L, when either total recoverable or dissolved is measured." (Emphasis added.) Thus, waters exceeding 87  $\mu$ g/L may not be "impaired" or even exceeding water quality standards. EPA's recognition merely acknowledges that aluminum is a naturally occurring element making up about 8% of the earth's surface.

relationship to aluminum, the chronic toxicity criterion for aluminum, as modified to adjust for hardness, would be an order of magnitude above the chronic U.S. EPA guidance criterion of 87  $\mu$ g/L.

Further, the Regional Board's Basin Plan also states that "water quality objectives do not require improvement over naturally occurring background concentrations. In cases where the natural background concentration of a particular constituent exceeds an applicable water quality objective, the natural background concentration will be considered to comply with the objective." *See* Basin Plan at IV-17.00. There is some indication that this is the reason why the Regional Board chose not to utilize the aluminum chronic criterion to interpret its narrative toxicity objective when it has identified impaired waters for inclusion on the section 303(d) list.

From the above, it is unclear as to the applicability of the aluminum guidance criteria in waters with pH and hardness greater than 6.5 and 10 mg/L, respectively. It is important to recognize that while a pH of 6.5 is near the lower end of the range observed in natural waters, it is rare to find a natural water with a hardness of less than 10 mg/L. It is also important to recognize that hardness levels have a significant impact on toxicity for many metals. These types of site specific considerations must be taken into account when determining the applicability of a particular guidance criteria to local waters. *See City of Woodland v. Regional Water Quality Control Board for the Central Valley Region, et al,* Case No. RG04-188200, Statement of Decision at pg. 13 (overturned Regional Board's regulation of aluminum because the Regional Board did not consider site-specific factors and, instead, simply relied on the EPA's ambient water quality criteria for aluminum).

Thus, the City suggests inclusion of a pH adjustment calculation, similar to the hardness adjustment calculations set forth in the CTR for many metals. *See e.g.*, 40 C.F.R. §131.38(b)(2). The suggested calculation is as follows:

Aluminum Limit = 
$$_{e}(1.209 - 2.426 \text{ (pH)} + 0.286 \text{ K}) \text{ where K} = (\text{pH})^{2}$$

This calculation should be added to Provision VII.G.

Request: Redo Reasonable Potential Analysis using MEC instead of a calculated and projected MEC. If an effluent limit is retained, add requested pH adjustment equation for aluminum to Provision VII.G., or at least impose limits no more stringent than the 87 µg/L for monthly average and 750 µg/L as a short-term average to coincide with USEPA's criteria guidance, upon a demonstration of reasonable potential to exceed both of these values. This would also be consistent with the "Limits to Apply Water Quality Objectives and Promulgated Criteria" of 87 contained in Table F-1 on Page F-9 of the Fact Sheet. If more stringent limits are applied, then the Regional Water Board must perform a CWC section 13263 analysis.

**Page 7, Provision IV.A.1.a. Copper Limits.** The Regional Water Board inappropriately utilizes the copper objective from Sacramento-San Joaquin Basin Plan, Table III-1, in the derivation of proposed effluent limitations instead of the CMC included in the California Toxics Rule.

The draft Tentative Order proposes use of the dissolved copper objective of 0.01~mg/l ( $10~\text{\mu g/l}$ ) in addition to the use of CTR dissolved copper standards in the derivation of proposed effluent limitations. The City argues that the Table III-1 copper objective should not be used in the effluent limit derivation for the following reasons: (1) the Table III-1 objective is based on scientific data developed prior to 1968, is aimed at the protection of freshwater aquatic life, and is therefore obsolete in comparison to the CTR Criterion Maximum Concentration for dissolved copper for protection of freshwater aquatic life, and (2) the Table III-1 is not a site-specific objective and is not based on studies unique to the Sacramento-San Joaquin Valley; therefore, the Table III-1 copper objective is not authorized for use under the CTR.

Review of the record that led to the establishment of the Table III-1 copper objective reveals the following:

- The subject copper objective was included in the 1975 Basin Plan as a result of direction provided to Basin Plan contractors in Management Memorandum No. 20 on March 21, 1973 by the Division of Planning and Research of the SWRCB.
- Management Memorandum No. 20 was sent to a statewide list of Basin Plan contractors and was not specific to the Central Valley.
- Management Memorandum No. 20 included a table titled "Tentative Guidelines for Evaluating the Quality of Water in Various Fresh-Water Habitats". This table was applicable to the following beneficial uses: Warm fresh-water habitat (WARM), Cold fresh-water habitat (COLD), Fish Spawning (SPWN), Fish Migration (MIGR) and Wildlife Habitat (WILD).
- In the above described table, a guideline value for copper of 0.01 mg/l was included. A footnote in the table indicated that the value was "Preliminary Information" derived from a revision to the National Technical Advisory Committee (NTAC) to the Secretary of the Interior, 1968. Water Quality Criteria. Federal Water Pollution Control Administration, US Department of the Interior.

Clearly the Table III-1 copper objective was adopted in the Basin Plan in 1975 to protect aquatic life uses based on scientific information at the time, specifically information contained in a 1968 national water quality criteria document.

Since 1968, the USEPA was established and national water quality criteria for copper for protection of aquatic life uses have been developed, following the Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses, 1985. These EPA criteria (which form the basis for the CTR copper standards) supersede and replace the 1968 NTAC advisory criteria that were the basis for the Table III-1 objective. The use of the Table III-1 copper objective in addition to the CTR standard in effluent limit derivation is, therefore, inappropriate (due to its basis in outdated science) and redundant (since the CTR standard considered all relevant and appropriate scientific evidence, including the data supporting the 1968 criteria.)

As noted above, given that the Table III-1 objective was based on a 1968 national criteria document, which were used as statewide guidelines in the 1975 Basin Planning Process, the objective clearly does not qualify as a site-specific objective. In the preamble to the CTR, the statement is made that site-specific criteria in the Basin Plans would be used in the calculation of water quality based effluent limits in NPDES permits. *See* 65 Fed. Reg. 31686 (May 18, 2000). The City argues that the copper objective in Table III-1 is not a site specific objective. The City points to the site specific objectives for the Sacramento River upstream of Hamilton City that are referenced in the CTR preamble. *Id.* Those site-specific objectives were established for a specific reach of the Sacramento River based on a site specific analysis. Such an analysis was not performed for the Table III-1 copper objective.

Request: For the above reasons, the City requests that the proposed effluent limits for copper be recalculated using only the CTR standards.

Page 7, Provision IV.A.1.a. Human Health-based Limits. The tentative permit improperly includes maximum daily limits to implement human-health based water quality objectives. The limits for iron, manganese, dichlorobromomethane, and chlorodibromomethane are all based on long-term (70 years of exposure) objectives to protect human health. No justification exists for short-term limits for these constitutents. In fact, for iron, the Regional Board has already been told as much. See In the Matter of the Own Motion Review of the City of Woodland, SWRCB Order No. WQ 2004-0010 (holding that "implementing the limits as instantaneous maxima appears to be incorrect because the criteria guidance value . . . is intended to protect against chronic effects.") The same rationale applies to the limits for manganese, dichlorobromomethane, and chlorodibromomethane.

Request: In accordance with SWRCB Order No. WQ 2004-0010, impose only monthly averages for all constituents with objectives set to protect against long term chronic effects.

Pages 8-9, Provision IV.A.1.b.-d. Maximum Daily and Mass Limits for BOD<sub>5</sub> and TSS. Federal law requires only monthly and weekly averages and concentration-based limits for BOD<sub>5</sub> and TSS. The Regional Water Board is proposing to add more stringent limits based on maximum daily values and mass limits that are more stringent than required by federal law.<sup>3</sup> As such, the Regional Water Board must perform a CWC section 13263 analysis prior to imposing these limits.

Other regional boards have removed previously included daily values and mass limits for conventional pollutants.<sup>4</sup> In a recently issued San Diego Region permit, the following justification was given: "Order No. R9-2006-002 does not retain the maximum at anytime concentration [...] for CBOD<sub>5</sub> and total suspended solids contained in Order No. 2000-012 and previous permits for the Discharger which were established using best professional judgment. Recent attempts to derive maximum at anytime limitations based on the secondary treatment

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<sup>&</sup>lt;sup>3</sup> The Regional Board attempts to justify its actions based on federal guidance. *See* Fact Sheet at pg. F-51. However, guidance cannot overrule federal regulatory requirements.

<sup>&</sup>lt;sup>4</sup> Differential treatment between different regions raises the issue of equal protection under the law. If the law is the same in both places, but the City is being regulated more stringently without adequate justification, then equal protection under the law has been violated.

standards at 40 CFR 133 using appropriate statistical approaches did not yield similar results as the previous maximum at anytime limitations; therefore, based on this new information, retaining the previous maximum at anytime limitations in Order No. R9-2006-002 is not supported." A similar justification exists to remove the daily limits from the City's tentative permit.

Similarly, other Regional Boards do not routinely include mass limits for conventional pollutants. *See e.g.*, Order R2-2005-0008 at pg. 26; *see also* Order No. R9-2006-002 at pg. F-25 (the new permit "does not retain the [...] mass emission rate limitations for CBOD<sub>5</sub> and total suspended solids contained in Order No. 2000-012 and previous permits for the Discharger which were established using best professional judgment." Order No. R9-2006-002 at pg. F-17. "In the case of secondary treatment standards which are expressed as BOD (or CBOD) and TSS concentrations and technology-based concentration effluent standards for Oil and Grease..., the need for mass emission rate (MER) limitations that are directly related to protection of ... waters or proper operation has not been determined. Consequently, MER effluent limitations for CBOD, TSS and Oil and Grease have not been included in this Order; however, if information demonstrating a need for these limitations become available in the future, they may be reinstated in this Order.")

#### Request: Remove all maximum daily and mass limits for conventional pollutants.

Pages 8-9, Provision IV.A.1.b.-d. Mass Limits. Each of the tables in these provisions includes Mass Effluent Limitations for Discharge Point 001 and/or Discharge Point 002. If mass limits are retained notwithstanding the City's request for removal, the City then requests that footnote 1 be clarified to state that compliance with the mass limits contained in the table are to be measured during the average dry weather flow period, and do not apply in wet weather. The City suggests that the average dry weather flow period be defined as the period of lowest flow for three consecutive dry weather months in a calendar year. Also, the Regional Water Board should modify the mass limits for average weekly and maximum daily mass limits by a peaking factor that account for normal variation in these values during a typical dry weather month.

Alternatively, the City requests that the tables be modified to add mass limits that are applicable during the highest average wet weather month that is projected to occur when ADWF flows are at 9 mgd. In this case, the City also requests modification of the average weekly and maximum daily mass limits by a peaking factor to account for normal variation in these values during the highest average wet weather month.

Request: If mass limits are retained, they should not apply in wet weather, or should be calculated on peak wet weather flows.

**Page 8, Provision IV.A.1.h, and Page E-5.** Chlorine. The City requests that the following footnote, taken from language in other regions' permits, be added to the effluent limits for chlorine residual:

"Requirement defined may be below the limit of detection in standard test methods defined in the latest edition of *Standard Methods for the Examination of Water and Wastewater*. The Discharger may elect to use a continuous on-line monitoring system(s) for measuring flows, chlorine residual and sulfur dioxide (or other dechlorinating chemical) dosage (including a

safety factor) and concentration to prove that chlorine residual exceedances are false positives. If convincing evidence is provided, Regional Water Board staff may conclude that these false positive chlorine residual exceedances are not violations of this permit limitation."

Request: Add the requested footnote to the Chlorine Residual effluent limits and reference same in the MRP.

Page 9, Provision IV.A.1.g. and Fact Sheet, Page F-60. Temperature. The City thinks that language needs to be added to clarify that this limitation (i.e. that the "maximum temperature of the discharge shall not exceed the natural receiving water temperature by more than 20°F") derives from the temperature objectives in the Thermal Plan and that this limitation is subject to change as a result of the Temperature Study required in the Time Schedule Order that accompanies the draft permit. The Time Schedule Order includes a requirement to evaluate and implement alternatives to comply with the Thermal Plan or to clearly demonstrate that an exception to the Thermal Plan will not cause adverse impacts to aquatic life.

The Central Valley Basin Plan establishes the threshold for acceptable temperature alterations as "...it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely effect beneficial uses." If such demonstration is the result of the required study, and if a similar demonstration can be made to the satisfaction of the SWRCB to justify an exception to the Thermal Plan, the permit should state that the subject effluent limitation should and will be modified.

Finally, all temperature requirements should be contained in the permit, not a TSO. The Thermal Plan contains compliance schedule authority at paragraph 5 of the Implementation section. (Attached as Exhibit A herein) The City has demonstrated that a longer time schedule than one ending on July 1, 1977 as set forth in the Thermal Plan, is required to perform the studies authorized in the Thermal Plan (*see* paragraph 4 of the General Water Quality Provisions section and paragraph 4 of the Implementation section of the Thermal Plan) and to complete construction of any necessary facilities. Therefore, any requirements based on the thermal plan can be placed within the permit.

Request: Clarify that this limitation derives from the temperature objectives in the Thermal Plan and is subject to change as a result of the Temperature Study required in the Time Schedule Order that accompanies the draft permit. Make the changes to the time schedule as requested in the City's cover letter, including putting all temperature-related requirements in the permit, instead of the TSO.

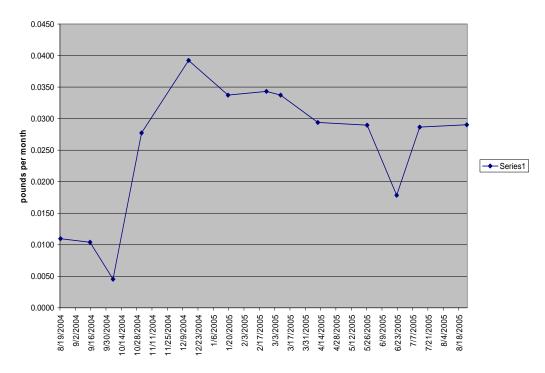
**Page 10, Provision IV.A.1.k. and A.2. Flow Restrictions.** To address the possibility that the City's current discharge flow limit of 9 mgd (ADWF) might be exceeded before 2008, the City suggests that the flow requirements be removed or that it be allowed to prepare an engineering study based on completed improvements so far and plant past performance that would allow a temporary increase in plant flow until the construction is completed.

#### Request: Add the following new Provision IV.A.2.g.:

"g. In the event the Discharger projects the Average Daily Discharge Flow to exceed 9 mgd before completion and operation of the Phase 1 Improvements, the Discharger shall complete an engineering study on the capability of the plant to process the additional incremental flow and loadings. The report will evaluate the improvements constructed to date and plant performance data. Upon submittal of this study and approval by the Executive Officer, a capacity increase to up to 10.8 mgd will be granted.

Page 11, Provision IV.A.2.d. Mercury Mass Limits. The City requests that the Regional Board modify the proposed monthly mass limit to be an annual mass limit to better reflect the long term concerns with mercury mass loadings. The City requests instead the previously suggested annual mass limit of 0.51 pounds per year. This newly proposed limit seems to be merely an application of a proposed monthly limit derived from the previous annual limit. It should be noted that the City will be required under the permit to take action to minimize the effluent mercury mass loading, both through treatment requirements and through source control activities. Therefore, an overly restrictive monthly mercury mass limit will not serve a reasonable purpose and may not be feasible given fluctuations in monthly loadings where some months have closely approached the proposed monthly value (e.g., a value of 0.0392 was seen in December of 2004).

#### Monthly mercury mass loadings (proposed limit = 0.042 lbs/month)



Request: Impose the previously suggested annual mass limit of 0.51 pounds per year in lieu of the monthly mass limit of 0.042 pounds per month.

Pages 11, 13 and 25, Provisions IV.B., IV.C., V.B. and VI.C.5, Page E-9, Paragraphs VI, VII, and VIII (relating to groundwater), Page F-59, Paragraphs IV.E. and F, Page F-61, Paragraph V.B., Page F-62, Paragraphs VI.D.2. and VI.E.1., Page F-70, Paragraph VII.B.5., and Page F-71, Paragraph VII.B.7. Unnecessary References and Provisions. These provisions referencing Land Discharge Specifications, Reclamation Specifications, Groundwater Limitations and Monitoring, and Construction, Operation and Maintenance Specifications, and Biosolids Monitoring should be removed. Another WDR Order should not be referenced as it might be claimed to be incorporated by reference into this NPDES permit and, thus, become federally enforceable. A separate order is enforceable on its own without being referenced herein.

Request: Remove Provisions IV.B., IV.C., V.B and VI.C.5., Paragraphs VI, VII, and VIII in Appendix E, and Paragraphs IV.E. and F., V.B., VI.D.2., VI.E.1., VII.B.5., and VII.B.7. in Appendix F as unnecessary, and renumber Provisions VI.C.6. and 7. as VI.5. and VI.6. in the permit and Paragraph VII.B.6. in the Fact Sheet.

Page 11, Provision V.A.1. Dissolved Oxygen. The proposed language is difficult to interpret. Tracy will monitor DO in the effluent continuously. Tracy will sample Old River once per week for temperature and DO. How is the City to determine "saturation in the main water mass"? In the winter, when the river is cold, the water may have a very high saturation number. Tracy's effluent will be warmer and, therefore, may be unable to hold enough oxygen to meet the 85% requirement. Should this provision apply when DO is not an issue in the river? These items need to be clarified

Request: Clarify either in the permit, the MRP, or Fact Sheet how and when this receiving water limitation applies, how each of these measurements are to be determined, and the background values to be used for comparison.

Page 12, Provision V.A.4. Temperature. The Regional Board should add language to clarify that these limitations derive from the temperature objectives in the Thermal Plan and that this limitation is subject to change as a result of the Temperature Study required in the Time Schedule Order that accompanies the draft permit. The Time Schedule Order includes a requirement to evaluate and implement alternatives to comply with the Thermal Plan or to clearly demonstrate that an exception to the Thermal Plan will not cause adverse impacts to aquatic life.

Request: Add language to clarify that these limitations derive from the temperature objectives in the Thermal Plan and that this limitation is subject to change as a result of the Temperature Study required in the Time Schedule Order that accompanies the draft permit.

**Pages 12-13, Provision V.A.6.b. and V.A.13.f.** MCLs. The tentative permit applies MCLs for radioactivity and pesticides directly to surface waters even though MCLs only apply to treated, served tap water.

Request: For the reasons provided herein and previously in comments related to the use of MCLs, Provisions V.A.6.b. and V.A.13.f. should be deleted.

Pages 14 and 17, Provisions VI.A.2.c. and VI.B.1. Unlawful Permit Modification. These provisions purport to require compliance with new regulatory effluent standards and prohibitions and new monitoring requirements even without an amendment of the permit. This requirement is of dubious validity because it prospectively incorporates by reference non-existent regulations, and improperly amends the permit without a formal amendment or public hearing and comment process. This is not allowed under State law. Delegation of activities related to modifications of waste discharge requirements to the Executive Office is not authorized. Some permits have included language that states that "The monitoring program may be modified by the Executive Officer at any time." The Regional Board's delegation powers only allow delegation of certain activities and only to the Board's Executive Officer. See Water Code §13223(a); see accord San Francisco BayKeeper, et al v. SFRWQCB, Order Granting Petition for Writ of Mandate and Statement of Decision, San Francisco Superior Court, Consolidated Case No. 500527 (Nov. 2003)(holding that the ability to make changes to a permit that will modify or enhance the substantive requirements of the permit cannot be delegated to the Executive Officer).

Request: Remove the second paragraph of Provision VI.A.2.c.

Pages 17, 25, 27, D-7, Provision VI.A.2.a., p. and q., Provision VI.C.6.a. and VI.C.7.a. and c, Appendix D-7, Paragraph V.E., and Page E-8, Paragraph V.C. Duplicative or Potentially Conflicting Provisions.

The permit contains two potentially conflicting requirements related to operator certification. *See* Provision VI.A.2.a. and Provision VI.C.6.a. One requires compliance with Title 23, Chapter 14 and one with Title 23, Chapter 26. The Regional Board should ensure that these provisions do not conflict, or remove the one that does not apply.

The permit contains no less than <u>FOUR provisions requiring 24 hour reporting</u>. This is unnecessary. *See e.g.*, Provisions VI.A.2.p. and Provision VI.C.7.c, Appendix D, Page D-7, Paragraph V.E., Appendix E, Page E-8, Paragraph V.C. Since this requirement is part of the Standard Provisions, all duplicative permit provisions should be removed.

Similarly, the permit contains two nearly identical requirements related to change in discharge location. *See* Provision VI.A.2.q. and Provision VI.C.7.a. Only one such provision should be included to avoid multiple "violations" being incurred for the same action.

Request: Remove duplicative or potentially conflicting requirements from the permit.

**Page 18, Provision VI.C.1.f. Dilution Credits.** This provision should be modified to include language stating "Should a real-time flow monitoring station be installed in the vicinity of the discharge, and if real-time flow monitoring data from the station <u>and supporting mathematical modeling analysis</u> demonstrates that sufficient dilution flows are available in Old River, this Order may be reopened to allow dilution credits based on the real-time flow monitoring data."

Request: Add the concept of "supporting mathematical modeling analysis" as set forth above into this Provision.

**Page 18. Provision VI.C.1.g. Water Effects Ratios (WER) and Metal Translators.** Modify the language to state that if the Discharger performs studies to determine site-specific WERs and/or site-specific dissolved-to-total metal translators for copper, iron, manganese, and aluminum, and if those study results are approved by the Executive Officer, this Order will be reopened to modify the effluent limitations for the applicable inorganic constituents.

Request: Change "may be reopened" to "will be reopened."

Page 19, Provision VI.C.1.h., and Fact Sheet, Page F-64, Paragraph VII.B.1.h. Human Health Dilution Credits. It is unclear why this needs to be a provision in this permit. The Antidegradation Policy does not require that permits be reopened upon implementation of new treatment technologies to lower effluent limits to meet the new performance levels. If harmonic mean levels are set to implement the existing water quality objectives, those same levels would apply despite the new technology.

Request: Remove Provision VI.C.1.h. and Paragraph VII.B.1.h. in Appendix F as not required and unnecessary.

Page 21, Provision VI.C.2.b. Best Practicable Treatment or Control (BPTC) of Salinity. The Regional Board should modify the language to state: "To comply with Resolution 68-16, the treatment or control of discharges of waste to waters of the state must be sufficient to provide the minimum degradation of such waters that is feasible and consistent with the maximum benefit to the people of the State, but in no case can the discharge cause the exceedance of applicable water quality objectives."

Request: Insert requested language.

Page 22, Provision VI.C.2.c. Electrical Conductivity (EC) Study. In accordance with the requirements of CWC section 13000, the Regional Board should modify the language to state: "Based on these factors, the study shall recommend site-specific numeric values for EC that provide reasonable protection for Old River's agricultural supply use designation. The Regional Water Board will evaluate the recommendations, select appropriate values and adopt site-specific objectives through a Basin Plan amendment, reevaluate reasonable potential for EC, and reopen the Order, as necessary, to include appropriate effluent limitations for EC."

Request: Insert requested language.

Page 23, Provision VI.C.4b. Compliance Schedules. Phase 1 Improvements. The Regional Board should modify the language to state that "The permitted average daily discharge dry weather flow may increase to 10.8 mgd" upon compliance with the stipulated conditions. Further, the Regional Board should clarify that the average dry weather flow is defined as the flow for three consecutive dry weather months in a calendar year.

Request: Make suggested changes to permit language.

**Page 23, Provisions VI.C.4.b.i. and VI.C.4.c.i. Final Effluent Limits.** The language of these sections needs to include "The discharge shall be in compliance with Final Effluent Limitations IV.A.1., except where interim effluent limits apply."

Request: Add the clause "except where interim effluent limits apply" to the end of the first sentence in Provisions VI.C.4.b.i. and VI.C.4.c.i.

Page 23, Provision VI.C.4.c. Compliance Schedules. Phase 2-4 Improvements. The Regional Board should modify the language to state that "The permitted average daily discharge dry weather flow may increase to 16 mgd upon compliance" with the stipulated conditions. Further, the permit should clarify that the average dry weather flow is defined as the flow for three consecutive dry weather months in a calendar year.

Request: Make suggested changes to permit language.

Page 24, Provision VI.C.4d. Compliance Schedules for Final Effluent Limitations for Copper. The Regional Board should modify the language by adding a sentence, as follows: "By May 18, 2010, or upon compliance with Special Provisions VI.C.4.b., whichever is sooner, the Discharger shall comply with the final effluent limitations for copper. Those final effluent limitations may be adjusted by either translator or Water Effect Ratios as described in Provision VI.C.1.g."

Request: Make suggested changes to permit language.

**Page 26, Provision VI.C.6.c.** Collection System. The City appreciates the removal of previously imposed requirements applicable to the collection system now that the collection system will be regulated separately under the statewide permit. However, the proposed language uses language that makes compliance with that separate permit a condition of this NPDES permit. To remedy this problem, the language of this provision must be amended to state: "Therefore, **by November 2, 2006**, the Discharger is required by that Order, not incorporated by reference herein, to shall apply for coverage under State Water Board Order 2006-0003 for operation of its wastewater collection system.

Request: Clarify that the statewide collection system general permit is not a condition to or incorporated by reference into this NPDES permit for the treatment plant.

Pages 27-28, Provision VII. Compliance Determination. The permit should not contain any provisions relating to how compliance will be determined as that is instruction for the Regional Board staff, not for the permit holder. Furthermore, the proposed language prejudges violations, which should not be done without the benefit of a hearing where evidence can be presented and weighed. The City submitted draft language to the Regional Board used in another region and not objected to by the State Water Board or USEPA. The City has been told that this Region will not waver from the Permit Template language. If that is the case, then the Permit Template has become an underground regulation that has not been formally promulgated. The State Water Board staff and counsel have indicated that the Permit Template is merely a template and is guidance only. Regional Boards may alter the language and the language of this portion of the template has been altered in other regions. *See* R9-2006-002.

The compliance determination language proposed herein is policy language never adopted by statute or as a regulation. This policy language improperly prejudges where an exceedance equates to an instance of non-compliance or a "violation" and how many days of non-compliance

will be found. Even EPA's comment letter found this to be inappropriate. *See* Comment letter from USEPA Region IX on Proposed Permit for Fallbrook Public Utility District (Aug. 3, 2005)("determinations about whether a discharge violates the Clean Water Act and/or a permit are appropriately made on a case by case basis.") Thus, blanket compliance determination language applicable to all permits is inappropriate.

This prejudgment is improper particularly when it is contrary to adopted state law. The Mandatory Minimum Penalties (MMP) statute does not find every exceedance to be a "violation" and does not find 31 or 7 "violations" from 31 or 7 days of exceedances, but merely one violation. *See* Water Code §13385(i); State Water Resources Control Board, *Water Quality Enforcement Policy* at 22(Feb. 19, 2002); *see also* SWRCB SB709 Questions & Answers Document at 15, Q.39 (April 17, 2001)(if "the discharger has violated a monthly average effluent limitation, the Regional Board should consider that one violation."). Further, the date of the sample generally only indicates a violation on the date of the data collection and other evidence is required to demonstrate that violations occurred on more than one day. *See* SWRCB SB709 Questions & Answers Document at 13, Q.35 (April 17, 2001). For these reasons, compliance determination language is more appropriately included in regional or statewide policy documents, instead of individual permits. *See e.g.*, SIP at 2.4.5.

Finally, determination of more than one violation per day, as is suggested with the language in the sections related to instantaneous maximum and minimum effluent limitations is inconsistent with state and federal law. The Water Code dictates penalties "for each day in which the violation occurs," and the CWA discusses penalties "per day for each violation." Water Code §13385(c)(1); 33 U.S.C. §1319(d). Thus, multiple violations each day are not authorized.

For the above stated reasons, the City requests the following language:

#### "VII. Compliance Monitoring Determination

#### A. Average Monthly Effluent Limitation (AMEL).

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of noncompliance in a 31-day month). The average of daily discharges over the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for that month only. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Dischargers will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

The Discharger shall determine the average monthly effluent value (AMEV) for a given parameter by calculating the arithmetic average of all daily effluent values (DEVs) for each parameter within each calendar month. The AMEV calculation for a given calendar month shall not include DEVs from any other calendar month. If only a single DEV is obtained for a parameter during a calendar month, that DEV shall be considered the

AMEV for that parameter for that calendar month. The AMEV shall be attributed to each day of the calendar month for determination of compliance with the Average Monthly Effluent Limitation (AMEL) for a given parameter for that given calendar month. For any calendar month during which no DEV is obtained, the AMEV cannot be determined for that calendar month.

#### B. Average Weekly Effluent Limitation (AWEL).

If the average of daily discharges over a calendar week (Sunday through Saturday) exceeds the AWEL for a given parameter,. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

The Discharger shall determine the average weekly effluent value (AWEV) for a given parameter by calculating the arithmetic average of all daily effluent values (DEVs) for each parameter within each calendar week (Sunday through Saturday). The AWEV calculation for a given calendar week shall not include DEVs from any other calendar week. If only a single DEV is obtained for a parameter during a calendar week, that DEV shall be considered the AWEV for that parameter for that calendar week. The AWEV shall be attributed to each day of the calendar week for determination of compliance with the Average Weekly Effluent Limitation (AWEL) for a given parameter for that given calendar week. For any calendar week during which no DEV is obtained, the AWEV cannot be determined for that calendar week.

#### C. Maximum Daily Effluent Limitation (MDEL).

If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

The Discharger shall determine the daily effluent value (DEV) for a given parameter from the results of a flow-weighted 24-hour composite sample collected during a calendar day (12:00 am through 11:59 pm) or any continuous 24-hour period that ends on and reasonably represents a given calendar day for purposes of sampling. Upon approval by the Regional Board, the Dischargers may also determine the DEV for a given parameter from the arithmetic mean of results from one or more flow-weighted grab samples taken over the course of one calendar day or a 24-hour period that reasonably represents the calendar day. The DEV shall not include results from any sample outside of the 24-hour period that represents the calendar day. The DEV shall be attributed to the calendar day for determination of compliance with the Maximum Daily Effluent Limit (MDEL) for a given parameter for that given calendar day. For any calendar day during

which a 24-hour flow-weighted composite sample, or flow-weighted grab samples in lieu of a 24-hour composite sample, are not obtained, a DEV cannot be determined for that calendar day.

#### D. Instantaneous Minimum Effluent Limitation.

The instantaneous minimum effluent concentration limitation shall apply to grab sample determinations. If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for that parameter for that single sample. Noncompliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of noncompliance with the instantaneous minimum effluent limitation).

The Discharger shall determine the instantaneous effluent value (IEV) for a given parameter from the results of any grab sample. The IEV for a given grab sample shall not include IEVs from any other grab sample. An IEV shall be attributed to each separate grab sample result for determination of compliance with the Instantaneous Minimum Effluent Limitation for a given parameter.

#### E. Instantaneous Maximum Effluent Limitation.

The instantaneous maximum effluent concentration limitation shall apply to grab sample determinations. If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for that parameter for that single sample. Noncompliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of noncompliance with the instantaneous maximum effluent limitation).

The Discharger shall determine the instantaneous effluent value (IEV) for a given parameter from the results of any grab sample. The IEV for a given grab sample shall not include IEVs from any other grab sample. An IEV shall be attributed to each separate grab sample result for determination of compliance with the Instantaneous Maximum Effluent Limitation for a given parameter.

Request: Replace the proposed Compliance Determination language with the language above, which was previously provided to Regional Board staff.

#### **ATTACHMENT A**

**Page A-1, Definition of BPTC.** This definition includes the inaccurate statement that "Exceedance of a water quality objective in a Basin Plan constitutes 'pollution.'" This is not an accurate definition of "Pollution." Instead, this sentence should be removed or it should state: "Pollution is defined in CWC section 13050(*l*)."

Request: Remove or amend the last sentence as requested.

**Page A-2, Definition of Six-month Median Effluent Limitation.** Since the permit does not contain any six month median effluent limits, this definition is unnecessary and should be removed.

Request: Remove definition of six-month median effluent limitation.

#### **ATTACHMENT D**

**Pages D-6 and D-9 to D-10, Paragraphs V.B.2.a. and b., and VII.A.** These paragraphs relate to Non-Municipal Facilities. Since these paragraphs do not apply, they should be removed from this municipal permit.

Request: Remove Paragraphs V.B.2.a. and b., and VII.A., and renumber remaining paragraphs.

#### ATTACHMENT E - MONITORING AND REPORTING PROGRAM

**Page E-2, Paragraph II, Table of Monitoring Locations.** The monitoring station R-004 is not a convenient location unless the City is able to take samples from the bridge itself. Please change to state that samples can be taken "at from the Tracy Road Bridge."

Request: Change R-004 Monitoring Station to read that samples can be taken "at from the Tracy Road Bridge."

**Page E-6. Paragraph IV.A.1., footnote 2.** This footnote states that the "Effluent Temperature monitoring shall be at the Outfall location." This footnote should replace Outfall location with M-001, or delete the note entirely. The City cannot continuously monitor the effluent temperature at the outfall in the river.

Request: Change "Outfall location" to "M-001," or remove footnote.

Page E-6, Paragraph IV.A.1., footnote 5, and Page E-10, Paragraph VIII.A.1., footnote 2. This footnote states that the "Detection limits shall be equal to or less than the lowest minimum level published in Appendix 4" of the SIP. This is not required by the SIP and should not be required here. The SIP allows the permit holder to chose an ML to use for compliance determination purposes. *See* SIP at Section 2.4.2. Only when there is no ML value below the effluent limitation may the RWQCB select the lowest ML value for inclusion in the permit. For this reason the footnote needs to add a clarifying clause at the end.

Request: Add "for any effluent limits where there is no ML value below the effluent limitation" at the end of footnote 5 on Page E-6 and footnote 2 on Page E-10 to be consistent with SIP Section 2.4.2.

**Page E-6, Paragraph V.A.3. Test Species.** Juvenile rainbow trout have always been allowed, both in Tracy's current permit and in the EPA method. Therefore, the City requests that the word "juvenile" be added as a clarifier to rainbow trout.

Request: Add "juvenile" before the term "rainbow trout."

**Page E-10, Paragraph VIII.A.1.** A footnote should be added to the table related to bis(2-ethylhexyl)phthalate to coincide with the text on Pages F-32 and F-33, stating that after one year of monitoring, the monitoring will be reduced to annual if no data exceed the CTR criterion for this constituent.

Request: Insert a footnote for bis(2-ethylhexyl)phthalate stating that after one year of monitoring, the monitoring will be reduced to annually if no data exceed the CTR criterion for this constituent.

**Page E-10, Paragraph VIII.A.1.** The reference to noting the presence or absence of bottom deposits should be removed as the River is over 20 feet deep and bottom deposits are not readily visible.

Request: Remove reference to "c. bottom deposits" on Page E-10.

#### <u>ATTACHMENT F – FACT SHEET</u>

**Page F-9, Table F-1.** The included Mercury Average Mass Loading (lbs/day) is incorrect. The monthly mass limit is 0.042 pounds per month at ADWF of 9 mgd.

Request: Amend mercury average mass loading figure with 0.042 pounds per month.

Page F-10, Paragraph III.A.5 and Page F-39, Paragraph IV.C.3.v. Inconsistent Statements. On Page F-10, it states that "no effluent limitations are included in this permit pursuant to CWC section 13263.6(a)." However, on Page F-39, the Fact Sheet states that "Effluent limitations for nitrate and nitrite are required pursuant to CWC section 13263.6(a)." Both cannot be correct.

Request: Remove one of the inconsistent statements regarding CWC §13263.6(a) from the Fact Sheet.

Page F-10, Paragraph III.A.6. Stormwater Requirements. This section incorrectly states that the Industrial general permit regulates storm water discharges from "municipal sanitary sewer systems." Instead, this should read "wastewater treatment plant facilities."

Request: Replace "municipal sanitary sewer systems" with "wastewater treatment plant facilities."

**Page F-12, Paragraph IV.** The first full paragraph on this page states that "Federal Regulations mandate numerical effluent limitations." This is incorrect. *See Communities for a Better Environment,* 109 Cal.App.4th at 1104-5. In fact, case law suggests that Congress did not intend numeric effluent limitations to be the requisite type of limitation on pollution discharges under the CWA, but intended a flexible approach, including alternative control strategies. (*Natural Resources Defense Council, Inc. v. Costle* (D.C. Cir. 1977) 568, F.2d 1369, 1380 & fn. 21, *Communities for a Better Environment,* 109 Cal.App.4th at 1105).

The State Water Board itself ruled in 1991 that "numeric effluent limitations are not legally

required" under federal law. (In the Matter of the Petition of Citizens for a Better Environment, Save San Francisco Bay Association, and Santa Clara Valley Audubon Society, Order No. WQ 91-03, May 16, 1991). While the State Board conceded that "in most cases, the easiest and most effective chemical-specific limitation would be numeric," the State Board ultimately ruled that "there is no legal requirement that effluent limitations be numeric." (Id. (emphasis added); see accord Communities for a Better Environment, 109 Cal.App.4th at 1105).

Request: Remove reference to federal legal requirement for numeric effluent limitations. To the extent State law requires numeric limits, this requirement is more stringent than federal law and requires an analysis be performed under CWC sections 13263 and 13241.

**Page F-12, Paragraph IV.A.1.** The citation to the U.S. v. City of Toledo decision should be removed. This case has no precedential value in the Ninth Circuit.

Request: Remove last sentence from F-12 that carries over to Page F-13 as not applicable in California.

**Page F-20, Paragraph VI.C.2.b.v.** The last sentence in the first paragraph states that "The SIP does not apply to non-priority pollutants, in which case the more stringent of the Basin Plan or USEPA guidance applies." The SIP and the Basin Plan are the only things that legally apply. USEPA guidance cannot trump an adopted State regulation in the form of the SIP or a Basin Plan, particularly where USEPA has approved of that Basin Plan.

Request: Amend this paragraph to read: "... Primary policy and guidance on determining mixing zone and dilution credits is provided by the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California (State Implementation Policy or SIP, the USEPA Technical Support Document for Water Quality-Based Toxics Control (EPA/505/2-90-001)(TSD), and the Basin Plan. For NPDES Permits in California, the SIP policy supersedes the USEPA guidance for priority pollutants, to the extent that it addresses a particular procedure. The SIP does not apply to non-priority pollutants, in which case the more stringent of the Basin Plan or USEPA guidance applies, to the extent that it addresses a particular procedure. If no procedure applies in the SIP or the Basin Plan, then the Regional Board may use the USEPA Technical Support Document for Water Quality-Based Toxics Control (EPA/505/2-90-001)(TSD) as guidance."

**Page F-28, Paragraph V.C.3.b.** This paragraph indicates that USEPA has developed water quality criteria guidance. Where such guidance exists, the proper procedure is to develop and adopt numeric water quality objectives into the Basin Plan pursuant to the requirements of 33 U.S.C. §1313(c)(2); CWC §13241. Narrative objectives cannot be relied upon for eternity when guidance criteria exist.

While Federal regulations do authorize the use of narrative water quality objectives for toxicity in limited circumstances (albeit in direct contravention of the CWA's mandate). (See 40 C.F.R. §122.44(d)(1)(vi), and §131.11(b)), those regulations clearly intended that any such narrative objectives would be used only as *interim* measures until numeric objectives were adopted. (54 Fed. Reg. 23876, 23877 (1989) ("EPA is promulgating paragraph (vi) as <u>an interim measure</u> to control a pollutant of concern until the state promulgates a water quality criterion for the

pollutant.")(emphasis added)). Thus, the Regional Board exceeds its authority by relying on the narrative water quality objective for Toxicity *indefinitely*, and particularly where ample information existed to allow the State to properly adopt a numeric water quality objective.<sup>5</sup>

Request: Adopt site specific objectives for all constituents that USEPA has promulgated criteria guidance in accordance with 33 U.S.C. §1313(c)(2) and CWC §13241.

Pages F-29, F-30, F-33, F-36, F-37, F-38, F-48, Paragraphs V.C.3.b., d., k., r., s., t., u., v., ff. The Fact Sheet states that the discharge has the reasonable potential to violate the Basin Plan's narrative toxicity or narrative chemical constituents objectives for several constituents. The permit or fact sheet must include evidence to demonstrate that a constituent exceeds these narrative objectives, as applicable to the local conditions. In addition, and notwithstanding the above comments, the permit must include interim limits within the permit instead of in an attached TSO. Recent binding California case law held that where a regional board newly interprets a narrative objective in the Basin Plan, the regional board may then include an effluent limit and a compliance schedule as authorized under that Plan. In this case, the Regional Board's Basin Plan allows a compliance schedule of up to 10 years. Thus, the Basin Plan authorizes the schedule of compliance to be including within the amended NPDES permit. See accord Communities for a Better Environment v. State Water Resources Control Board, 34 Cal.Rptr.3d 396, 410 (2005).

Request: Provide evidence that narrative objectives have the reasonable potential to be exceeded based on local conditions. Remove all interim limits from the TSO that are required through implementation of narrative objectives and place them inside the NPDES permit.

**Page F-37, Paragraph V.C.3.r. Iron.** There is a typographical error on the 7<sup>th</sup> line from top of page. The reference to a "MDEL of 300 mg/l" should be "300 ug/l" for iron.

Request: Correct the typographical error.

**Page F-46, Paragraph V.C.3.aa.vi. Salinity Sources.** The City suggests the following changes to the paragraph related to the discharges from Leprino:

Leprino discharges an additional salt load to the Facility. Leprino provides preliminary treatment of its wastewater to reduce the high organic loading typical of food processing waste. However, no <u>specific</u> treatment is provided to reduce the <u>high</u> salt loading. The <u>Leprino's pre-treated</u> industrial wastewater is discharged to the Discharger's industrial treatment facility, which includes 52 acres of unlined ponds, and is returned to the main treatment facility at the primary sedimentation tanks. The <u>52 acres of industrial</u> ponds provide significant residence time. While in the <u>industrial</u> ponds, salts <u>are may be</u> concentrated through the evaporation of the wastewater. In addition, the <u>Discharger</u>

Exhibit 31).

<sup>&</sup>lt;sup>5</sup> In a 1990 precedential administrative order, the Respondent State Board itself held that the Clean Water Act and federal regulations require the adoption of numeric water quality-based objectives for toxicity by February 1990, even where the relevant Basin Plan already contains a narrative water quality objective for toxicity. (*In the Matter of the Petition of Citizens for a Better Environment (CBE), et al, United States Fish and Wildlife Service (USFWS), and City of San Jose*, SWRCB Order No. WQ 90-5, 1990 Cal. ENV LEXIS 26 at 75- 77 (October 4, 1990) at

<u>Leprino</u> wastes <u>may contain</u> high TDS process water from the main treatment facility to the <u>industrial</u> ponds, such as digester supernatant, pump seal water, boiler cooling water, groundwater from construction de-watering activities, etc. Based on data provided by the <u>Discharger from January 2003 through December 2004, the The TDS of Leprino's pretreated</u> industrial wastewater discharged to the <u>industrial</u> ponds is <u>primarily in the range of 1500 mg/L to 2300 mg/L.</u> has an average TDS of about 1000 mg/L, but triples to an average TDS of over 3000 mg/L by the time the wastewater is returned to the main facility. This results in a significant salt load to the main treatment facility, and <u>ultimately to Old River. Leprino's pre-treated industrial wastewater is then commingled with Discharger's water in the 52 acres of ponds and discharged to the main treatment facility.</u>

Request: Make the suggested changes to the paragraph above.

**Page F-55. Paragraph V.C.5.a. Acute Aquatic Toxicity.** The City questions whether a reasonable potential analysis has been performed prior to inclusion of toxicity requirements in the draft permit. Under federal law, both WET requirements and specific chemical effluent limits are not required. *See* 40 C.F.R. §122.44(d)(1)(iv) and (v). If these requirements are maintained, then the City requests the changes noted below. Juvenile rainbow trout have always been allowed, both in Tracy's current permit and in the EPA method and this section should recognize that fact and not require the use of larval fathead minnows.

a. Acute Aquatic Toxicity. The Basin Plan states that "... effluent limits based upon acute biotoxicity tests of effluents will be prescribed where appropriate...". Effluent limitations for acute toxicity have been included in this Order. WDR Order No. 96-104 required compliance with the testing procedures contained in EPA/600/4-90/027F. EPA/600/4-90/027F required the use of larval fathead minnows. Because the Discharger was not able to successfully perform this test with their flow-through bioassay, the Discharger was allowed to use juvenile rainbow trout. In October 2002, the USEPA promulgated EPA-821-R-02-012, revising the previous edition. The new USEPA procedure requires the use of larval stage (0 to 14 days old) test species. Larvae are much more sensitive to ammonia levels than the juvenile species. Compliance with the new USEPA procedure for the acute bioassay test constitutes a more stringent acute toxicity limitation than was previously allowed. This Order requires that the Discharger comply with the new USEPA procedure, but allows the Discharger to remove ammonia-related toxicity prior to conducting acute toxicity tests until July 31, 2008, or until completion of Phase 1 Improvements, at which time the Discharger must fully nitrify and denitrify the wastewater and must implement the test without modifications to eliminate ammonia toxicity. The time schedule is authorized to be included in the Monitoring and Reporting Program based on 40 CFR section 122.47.

Request: Perform a reasonable potential analysis for toxicity and if toxicity requirements are maintained, make the suggested changes to the paragraph above.

#### TIME SCHEDULE ORDER

The City strongly urges the Regional Board not to adopt this Time Schedule Order and to instead include any requirements suggested therein in the permit instead. Ample compliance schedule authority exists in the Basin Plan and Thermal Plan to allow the Regional Board to place requirements for temperature and for constituents imposed based upon a narrative objective in the Basin Plan (e.g., aluminum, ammonia, nitrate, and nitrite) within the permit. *See Communities for a Better Environment v. State Water Resources Control Board*, 34 Cal.Rptr.3d 396, 410 (2005).

Request: Move all requirements of the TSO into the Permit and delete the need to adopt a TSO. Make changes requested in the City's cover letter to these comments.

Notwithstanding the above comment and request, the City submits the following comments on the TSO:

**Page 1.** There is a typographical error in Paragraph 2. The reference to temperature should be in section V.A.4 (not 6)

**Page 5.** The same error is contained in Paragraph 1. The reference to Receiving Water Limitations V.A.6.a should be V.A.4.a.

785347.1

# EXHIBIT A

#### State Water Resources Control Board

# WATER QUALITY CONTROL PLAN FOR CONTROL OF TEMPERATURE IN THE COASTAL AND INTERSTATE WATERS AND ENCLOSED BAYS AND ESTUARIES OF CALIFORNIA<sup>1</sup>

#### **DEFINITION OF TERMS**

- 1. <u>Thermal Waste</u> Cooling water and industrial process water used for the purpose of transporting waste heat.
- 2. <u>Elevated Temperature Waste</u> Liquid, solid, or gaseous material including thermal waste discharged at a temperature higher than the natural temperature of receiving water. Irrigation return water is not considered elevated temperature waste for the purpose of this plan.
- 3. <u>Natural Receiving Water Temperature</u> The temperature of the receiving water at locations, depths, and times which represent conditions unaffected by any elevated temperature waste discharge or irrigation return waters.
- 4. <u>Interstate Waters</u> All rivers, lakes, artificial impoundments, and other waters that flow across or form a part of the boundary with other states or Mexico.
- 5. <u>Coastal Waters</u> Waters of the Pacific Ocean outside of enclosed bays and estuaries which are within the territorial limits of California.
- 6. Enclosed Bays Indentations along the coast which enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays will include all bays where the narrowest distance between headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to the following: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.
- 7. <u>Estuaries and Coastal Lagoons</u> Waters at the mouths of streams which serve as mixing zones for fresh and ocean water during a major portion of the year. Mouths of streams which are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to

This plan revises and supersedes the policy adopted by the State Board on January 7, 1971, and revised October 13, 1971, and June 5, 1972.

extend seaward if significant mixing of fresh and saltwater occurs in the open coastal waters. The waters decribed by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by Section 12220 of the California Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge and appropriate areas of Smith River, Klamath River, Mad River, Eel River, Noyo River, and Russian River.

- 8. <u>Cold Interstate Waters</u> Streams and lakes having a range of temperatures generally suitable for trout and salmon including but not limited to the following: Lake Tahoe, Truckee River, West Fork Carson River, East Fork Carson River, West Walker River and Lake Topaz, East Walker River, Minor California-Nevada Interstate Waters, Klamath River, Smith River, Goose Lake, and Colorado River from the California-Nevada stateline to the Needles-Topoc Highway Bridge.
- 9. <u>Warm Interstate Waters</u> Interstate streams and lakes having a range of temperature generally suitable for warm water fishes such as bass and catfish. This definition includes but is not limited to the following: Colorado River from the Needles-Topoc Highway Bridge to the northerly international boundary of Mexico, Tijuana River, New River, and Alamo River.
- 10. Existing Discharge Any discharge (a) which is presently taking place, or (b) for which waste discharge requirements have been established and construction commenced prior to the adoption of this plan, or (c) any material change in an existing discharge for which construction has commenced prior to the adoption of this plan. Commencement of construction shall include execution of a contract for onsite construction or for major equipment which is related to the condenser cooling system.

Major thermal discharges under construction which are included within this definition are:

- A. Diablo Canyon Units 1 and 2, Pacific Gas and Electric Company.
- B. Ormond Beach Generating Station Units 1 and 2, Southern California Edison Company.
- C. Pittsburg No. 7 Generating Plant, Pacific Gas and Electric Company.
- D. South Bay Generating Plant Unit 4 and Encina Unit 4, San Diego Gas and Electric Company.
- 11. New Discharge Any discharge (a) which is not presently taking place unless waste discharge requirements have been established and construction as defined in Paragraph 10 has commenced prior to adoption of this plan or (b) which is presently



- taking place and for which a material change is proposed but no construction as defined in Paragraph 10 has commenced prior to adoption of this plan.
- 12. <u>Planktonic Organism</u> Phytoplankton, zooplankton and the larvae and eggs of worms, molluscs, and arthropods, and the eggs and larval forms of fishes.
- 13. <u>Limitations or Additional Limitations</u> Restrictions on the temperature, location, or volume of a discharge, or restrictions on the temperature of receiving water in addition to those specifically required by this plan.

#### SPECIFIC WATER QUALITY OBJECTIVES

#### 1. Cold Interstate Waters

A. Elevated temperature waste discharges into cold interstate waters are prohibited.

#### 2. Warm Interstate Waters

- A. Thermal waste discharges having a maximum temperature greater than 5°F above natural receiving water temperature are prohibited.
- B. Elevated temperature wastes shall not cause the temperature of warm interstate waters to increase by more than 5°F above natural temperature at any time or place.
- C. Colorado River Elevated temperature wastes shall not cause the temperature of the Colorado River to increase above the natural temperature by more than 5°F or the temperature of Lake Havasu to increase by more than 3°F provided that such increases shall not cause the maximum monthly temperature of the Colorado River to exceed the following:

January	60°F	July	90°F
February	65°F	August	90°F
March	70°F	September	90°F
April	75°F	October	82°F
May	82°F	November	72°F
June	86°F	December	65°F

D. Lost River - Elevated temperature wastes discharged to the Lost River shall cause the temperature of the receiving water to increase by more than 2°F



when the receiving water temperature is less than 62°F, and 0°F when the receiving water temperature exceeds 62°F.

E. Additional limitations shall be imposed when necessary to assure protection of beneficial uses.

#### 3. Coastal Waters

#### A. Existing discharges

(1) Elevated temperature wastes shall comply with limitations necessary to assure protection of the beneficial uses and areas of special biological significance.

#### B. New discharges

- (1) Elevated temperature wastes shall be discharged to the open ocean away from the shoreline to achieve dispersion through the vertical water column.
- (2) Elevated temperature wastes shall be discharged a sufficient distance from areas of special biological significance to assure the maintenance of natural temperature in these areas.
- (3) The maximum temperature of thermal waste discharges shall not exceed the natural temperature of receiving waters by more than 20°F.
- (4) The discharge of elevated temperature wastes shall not result in increases in the natural water temperature exceeding 4°F at (a) the shoreline, (b) the surface of any ocean substrate, or (c) the ocean surface beyond 1,000 feet from the discharge system. The surface temperature limitation shall be maintained at least 50 percent of the duration of any complete tidal cycle.
- (5) Additional limitations shall be imposed when necessary to assure protection of beneficial uses.

#### 4. Enclosed Bays

#### A. Existing discharges

(1) Elevated temperature waste discharges shall comply with limitations necessary to assure protection of beneficial uses.

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#### B. New discharges

- (1) Elevated temperature waste discharges shall comply with limitations necessary to assure protection of beneficial uses. The maximum temperature of waste discharges shall not exceed the natural temperature of the receiving waters by more than 20°F.
- (2) Thermal waste discharges having a maximum temperature greater than 4°F above the natural temperature of the receiving water are prohibited.

#### 5. Estuaries

#### A. Existing discharges

- (1) Elevated temperature waste discharges shall comply with the following:
  - a. The maximum temperature shall not exceed the natural receiving water temperature by more than 20°F.
  - b. Elevated temperature waste discharges either individually or combined with other discharges shall not create a zone, defined by water temperatures of more than 1°F above natural receiving water temperature, which exceeds 25 percent of the cross-sectional area of a main river channel at any point.
  - c. No discharge shall cause a surface water temperature rise greater than 4°F above the natural temperature of the receiving waters at any time or place.
  - d. Additional limitations shall be imposed when necessary to assure protection of beneficial uses.
- (2) Thermal waste discharges shall comply with the provisions of 5A (1) above and, in addition, the maximum temperature of thermal waste discharges shall not exceed 86°F.

#### B. New discharges

(1) Elevated temperature waste discharges shall comply with item 5A(1) above.



- (2) Thermal waste discharges having a maximum temperature greater than 4°F above the natural temperature of the receiving water are prohibited.
- (3) Additional limitations shall be imposed when necessary to assure protection of beneficial uses.

#### GENERAL WATER QUALITY PROVISIONS

- 1. Additional limitations shall be imposed in individual cases if necessary for the protection of specific beneficial uses and areas of special biological significance. When additional limitations are established, the extent of surface heat dispersion will be delineated by a calculated 1 1/2°F isotherm which encloses an appropriate dispersion area. The extent of the dispersion area shall be:
  - A. Minimized to achieve dispersion through the vertical water column rather than at the surface or in shallow water.
  - B. Defined by the Regional Board for each existing and proposed discharge after receipt of a report prepared in accordance with the implementation section of this plan.
- 2. The cumulative effects of elevated temperature waste discharges shall not cause temperatures to be increased except as provided in specific water quality objectives contained herein.
- 3. Areas of special biological significance shall be designated by the State Board after public hearing by the Regional Board and review of its recommendations.
- 4. Regional Boards may, in accordance with Section 316(a) of the Federal Water Pollution Control Act of 1972, and subsequent federal regulations including 40 CFR 122, grant an exception to Specific Water Quality Objectives in this Plan. Prior to becoming effective, such exceptions and alternative less stringent requirements must receive the concurrence of the State Board.
- 5. Natural water temperature will be compared with waste discharge temperature by near-simultaneous measurements accurate to within 1°F. In lieu of near-simultaneous measurements, measurements may be made under calculated conditions of constant waste discharge and receiving water characteristics.



- 1. The State Water Resources Control Board and the California Regional Water Quality Control Boards will administer this plan by establishing waste discharge requirements for discharges of elevated temperature wastes.
- 2. This plan is effective as of the date of adoption by the State Water Resources Control Board and the sections pertaining to temperature control in each of the policies and plans for the individual interstate and coastal waters shall be void and superseded by all applicable provisions of this plan.
- 3. Existing and future dischargers of thermal waste shall conduct a study to define the effect of the discharge on beneficial uses and, for existing discharges, determine design and operating changes which would be necessary to achieve compliance with the provisions of this plan.
- 4. Waste discharge requirements for existing elevated temperature wastes shall be reviewed to determine the need for studies of the effect of the discharge on beneficial uses, changes in monitoring programs and revision of waste discharge requirements.
- 5. All waste discharge requirements shall include a time schedule which assures compliance with water quality objectives by July 1, 1977, unless the discharger can demonstrate that a longer time schedule is required to complete construction of necessary facilities; or, in accordance with any time schedule contained in guidelines promulgated pursuant to Section 304(b) of the Federal Water Pollution Control Act.
- 6. Proposed dischargers of elevated temperature wastes may be required by the Regional Board to submit such studies prior to the establishment of waste discharge requirements. The Regional Board shall include in its requirements appropriate postdischarge studies by the discharger.
- 7. The scope of any necessary studies shall be as outlined by the Regional Board and shall be designed to include the following as applicable to an individual discharge:
  - A. Existing conditions in the aquatic environment.
  - B. Effects of the existing discharge on beneficial uses.
  - C. Predicted conditions in the aquatic environment with waste discharge facilities designed and operated in compliance with the provisions of this plan.
  - D. Predicted effects of the proposed discharge on beneficial uses.
  - E. An analysis of costs and benefits of various design alternatives.



- F. The extent to which intake and outfall structures are located and designed so that the intake of planktonic organisms is at a minimum, waste plumes are prevented from touching the ocean substrate or shorelines, and the waste is dispersed into an area of pronounced along-shore or offshore currents.
- 8. All waste discharge requirements adopted for discharges of elevated temperature wastes shall be monitored in order to determine compliance with effluent or receiving water temperature (or heat) requirements.
  - Furthermore, for significant thermal discharges as determined by the Regional Board or State, Regional Boards shall require expanded monitoring programs, to be carried out either on a continuous or periodic basis, designed to assess whether the source continues to provide adequate protection to beneficial uses (including the protection and propagation of a balanced indigenous community of fish, shellfish, and wildlife, in and on the body of water into which the discharge is made). When periodic expanded monitoring programs are specified, the frequency of the program shall reflect the probable impact of the discharge.
- 9. The State Board or Regional Board may require a discharger(s) to pay a public agency or other appropriate person an amount sufficient to carry out the expanded monitoring program required pursuant to paragraph 8 above if:
  - A. The discharger has previously failed to carry out monitoring programs in a manner satisfactory to the State Board or Regional Board, or;
  - B. More than a single facility, under separate ownerships, may significantly affect the thermal characteristics of the body of water, and the owners of such facilities are unable to reach agreement on a cooperative program within a reasonable time period specified by the State Board or Regional Board.

